REMARKS

Claims 1-27 are pending in the present application. Claims 1-9 and 21-27 are under consideration.

I. Line Numbers in Specification

The line numbers in the specification as filed do not correspond to the actual lines of text on each page. Specifically, each page typically contains five fewer lines than what is implied by the numbers in the left margin (*i.e.*, there are typically 31, rather than 36, lines per page). The applicant regrets any inconvenience this has caused. References to line numbers in this and subsequent correspondence will be based on the actual lines of text, and not on the line numbers in the margins.

II. Amendments to the Claims

Claim 7 was amended to depend on Claim 1 and to recite -domain- instead of "element" for proper antecedent basis relative to Claim 1.

Claims 8, 9 and 16 were amended to include -and- in their Markush Group lists.

Claim 16 was further amended to recite a method rather than a composition, for the reasons detailed in section II, below.

New Claims 21 and 25 include limitations relating to PhoQ. Basis for these claims can be found at least at page 15, lines 29-31, and page 27, lines 27-31, of the specification.

New Claim 22 includes the limitation that the biodetector is sheltered in a genetically engineered bacterial cell. Basis for this limitation can be found at least at page 13, lines 26-31 of the specification.

New Claim 23 includes the limitation that the signal converting element is a transmembrane fusion protein. Basis for this limitation can be found at least at page 14, lines 24-27 of the specification.

New Claim 24 includes the limitation that the extracellular ligand-specific moiety is derived from an antibody. Basis for

this limitation can be found at least at page 11, lines 3-7, and page 15, lines 8-12 of the specification.

New Claim 26 includes the limitation that the fusion protein is a fusion of an active domain of PhoQ, and a region of a heavy chain antibody. Basis for this limitation can be found at least at page 15, lines 29-31 of the specification.

New Claim 27 includes the limitation that the gene product is detectable by means of bioluminescence. Basis for this limitation can be found at least at page 17, line 19 of the specification.

The amendments to the claims introduce no new matter into the specification.

III. Confirmation of Response to Restriction Requirement

The Examiner has restricted the claims of the originally-filed application into the following groups: (I) Claims 1-9 and 16, drawn to a biodetector, classified in class 424, subclass 93.1; and (II) Claims 10-15 and 17-20, drawn to a method for detection of a selected substance, classified in class 435, subclass 4.

In the response filed on October 30, 1998, the applicant elected to begin prosecution with examination of Group I, Claims 1-9 and 16 without traverse.

Upon further reflection, it appears that Claim 16 is directed to the same subject matter as Claim 9. It further appears that, based on the independent claim (Claim 10) recited in Claim 16, Claim 16 was intended to be a method claim (like Claims 10-15 and 17-20). Claim 16 was apparently filed as a composition claim due to a typographical error.

Accordingly, Claim 16 has been amended by the present amendment to recite a method, thereby removing it from consideration during prosecution of the present application.

In view of the above, the applicant submits that the claims now under consideration are in condition for allowance. A Notice

of Allowance is therefore respectfully requested.

Respectfully submitted,

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